Referring to FIG. **18**, a second upper electrode **845** may be formed on the first insulating interlayer **840**. The second upper electrode **845** may be located on an area corresponding to the first gate electrode **835***a*, so that an additional capacitor CAP**2** may be formed in the pixel region. The additional capacitor CAP**2** may include the second upped electrode **845**, a second dielectric structure (i.e., a portion of the first insulating interlayer **840**) and a second lower electrode (i.e., the first gate electrode **835***a* of a first semiconductor device). A second insulating interlayer **850** may be formed on the first insulating interlayer **840** to cover the second upper electrode **845**.

Referring to FIG. **19**, the second insulating interlayer **850**, the first insulating interlayer **840**, the second gate insulation layer **830** and the first gate insulation layer **825** may be partially removed to form via holes that expose portions of the first and the second active patterns **820***a* and **820***b*, respectively. The via holes may expose a first source region and a first drain region of the first active pattern **820***a*, and a second source region and a second drain region of the second active pattern **820***b*. A first source electrode **855***a*, a first drain electrode **860***a*, a second source electrode **855***b* and a second drain electrode **860***b* may be formed on the second insulating interlayer **850** to fill the via holes. The first source and drain electrodes **855***a* and **860***a* may contact respectively the first source and drain regions of the first active pattern **820***a*, and the second source and drain electrodes **855***b* and **860***b* may contact the second source and drain regions of the second active pattern **820***b*.

In the transparent region, the second insulating interlayer **850** and the first insulating interlayer **840** may be partially removed to form a first contact hole **852** exposing a portion of the lower electrode **835***b*. For example, the via holes and the first contact hole **852** may be simultaneously formed by one etching process. The first source electrode **855***a* may extend onto the second insulating interlayer **850** and a sidewall of the first contact hole **852**, so that the first source electrode **855***a* may make contact with the first lower electrode **835***b*.

Referring to FIG. **20**, an insulation layer **855** may be formed on the second insulating interlayer **850** to fill the first contact hole **852**. The insulation layer **855** may cover the first source and drain electrodes **855***a* and **860***a*, and the second source and drain electrodes **855***b* and **860***b*. The insulation layer **865** may have a substantially planar surface for ease of forming of overlying structures. For example, the insulation layer **865** may be formed of an organic material or an inorganic material.

The insulation layer **865** may be partially etched to form a second contact hole **867** and an opening **869**. The second contact hole **867** may expose the extended portion of the first source electrode **855***a*. The opening **869** may expose a portion of the second insulating interlayer **850**. The second contact hole **867** and the opening **869** may be simultaneously formed in the pixel region and in the transparent region, respectively.

An electrode layer (not illustrated) may be formed on the insulation layer **865**, the exposed second insulating interlayer **850** and the exposed portion of first source electrode **855***a*. The electrode layer may be patterned to form a first electrode **870***a* of an organic light emitting structure and a first upper electrode **870***b* of the first capacitor CAP**1**. In the pixel region, the first electrode **870***a* may be formed on the insulation layer **865**, a sidewall of the second contact hole **867** and the extended portion of the first source electrode **855***a*. In the transparent region, the first upper electrode **870***b* may be formed on the insulation layer **865**, a sidewall of the opening **869** and the exposed second insulating interlayer **850**. For example, the electrode layer may be formed of a material having a transmittance or a material having a reflectivity.

Referring to FIG. **21**, a pixel defining layer **875** may be formed on the first electrode **870***a*, the first upper electrode **870***b* and the insulation layer **865** to fill the opening **869** and the second contact hole **867**. The pixel defining layer **875** may be formed of an organic material or an inorganic material to have a substantially planar surface.

In the pixel region, the pixel defining layer **875** may be partially removed to form a pixel opening that exposes a portion of the first electrode **870***a*. An organic light emitting layer **880** may be formed on the exposed portion of the first electrode **870***a* in the pixel opening. A second electrode **885** may be formed on the pixel defining layer **875**, a sidewall of the pixel opening and the organic light emitting layer **880**. An additional substrate, an encapsulation substrate and/or a window may be formed on the second electrode **885**.

According to exemplary embodiments of the inventive concept, a capacitor may be provided on a transparent region of an organic light emitting display device so that a sufficient capacitance for elements of the organic light emitting display device may be ensured without substantially reducing a transmittance of the organic light emitting display device. Additionally, the transparent region of the organic light emitting display device may serve as a mirror in accordance with the material included in a lower electrode of the capacitor and/or an upper electrode of the capacitor. Furthermore, the organic light emitting display device may include an additional capacitor in the pixel region such that the organic light emitting display device may have more sufficient capacitance of the element thereof without increasing an area of the pixel region.

The foregoing is illustrative of exemplary embodiments and is not to be construed as limiting the scope of the inventive concept. Although a few exemplary embodiments have been described, those skilled in the art will readily appreciate that many modifications are possible in the exemplary embodiments without materially departing from the novel teachings and advantages of the present inventive concept. Accordingly, all such modifications are intended to be included within the scope of the present inventive concept as defined in the claims. Therefore, it is to be understood that the foregoing is illustrative of various exemplary embodiments and is not to be construed as limited to the specific exemplary embodiments disclosed, and that modifications to the disclosed exemplary embodiments, as well as other exemplary embodiments, are intended to be included within the scope of the appended claims.

What is claimed is:

1. An organic light emitting display device having a pixel region and a transparent region, which comprises:

a substrate;

at least one semiconductor device disposed on the substrate in the pixel region;

an organic light emitting structure disposed on the at least one semiconductor device; and

a capacitor disposed on the substrate in the transparent region.

2. The organic light emitting display device of claim **1**, wherein the at least one semiconductor device comprises a first semiconductor device which includes a first active pattern disposed on the substrate, a first gate insulation layer disposed on the first active pattern, a first gate electrode disposed on the first gate insulation layer, a first source electrode contacting a first portion of the first active pattern